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Table 1 - RbR Change Table: This table identifies modifications to existing requirements in the RbR class as identified in the 7/31 baseline version of the RTM database.

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text
DADS0010#A	3940	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive updated metadata for products that have been QA'd.	A: TRMM <u>CERES</u> data described in the Data Type Matrix
DADS0020#A	3947	mission essential	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	Each DADS shall, upon receipt of updated metadata for products which have been QA'd, store the metadata in its inventory.	A: TRMM <u>CERES</u> products
DADS0100#A	4051	mission essential	SDPS	functional	test	un-verified	test <u>demo</u>	<u>un-verified</u>	Each DADS shall receive management directives from the SMC.	A: TBD
DADS0110#A	4052	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	A: TRMM products
DADS0120#A	6121	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive from the PGS, at a minimum, the following: a. L1-4 products b. (DELETED) c. Metadata d. Calibration e. Algorithms f. Schedule g. Status	A: TRMM <u>CERES</u> data described in the Data Type Matrix.
DADS0130#A	6123	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive from the EDOS and SDPF, at a minimum, the following: a. Production data (L0) b. Expedited data	A: ONLY MSFC AND LARC DAACS WILL INTERFACE WITH SDPF, ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS. Items a. and b. applicable for SDPF. TRMM CERES/LIS, and EDOS I/F testing only

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DADS0140#A	4055	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive from other DAACs, at a minimum, the following for the purpose of product generation: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	A: @ LIM level - to extent required for product generation A: <u>LaRC will receive VIRS, TOMS, and NMC data from GSFC for CERES Processing.</u>
DADS0145#A	4056	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall be capable of receiving from the ADCs, at a minimum, the following for the purpose of product generation: a. L0-L4 equivalent data sets b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	A: <u>NOAA only. NOAA NCEP is through DAO Interface.</u>
DADS0160#A	4057	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	A designated DADS shall receive from the EOC, at a minimum, the following: a. Spacecraft history log (or subset of history log) b. Associated Metadata	A: EOC early interface testing

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DADS0170#A	4058	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall be capable of receiving from designated EPDSs and ODCs, at a minimum, the following: a. L0-L4 data sets b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	A: For Landsat support for ingest early interface testing.
DADS0180#A	4060	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive from the users, at a minimum, the following: a. Metadata b. Correlative data c. Documents d. New derived data sets	
DADS0190#A	4062	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive from the SCF, at a minimum, the following: a. Special products (L1-L4) b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	A: Algorithm ingest and transfer to data server
DADS0210#A	4064	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall be capable of receiving, at a minimum, the following types of EOS instrument data in support of pre-launch checkout of the ground system: a. Real EOS instrument data b. Simulated EOS instrument data	Rel A has AM-1 and Landsat-7 ingest capability for early interface testing using simulated data

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DADS0220#A	4066	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall accept, at a minimum, the following data types in support of development of initial calibration: a. Instrument calibration data b. Scientific calibration	<u>A: Operational Support for TRMM (CERES) @ LaRC, and early EDOS I/F testing support</u>
DADS0250#A	4067	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive, at a minimum, data in the following forms: a. Physical electronic media b. Electronic communications network c. Hardcopy media	A: Physical electronic and network
DADS0260#A	4070	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall receive non-EOS correlative and ancillary digital data.	A: TRMM testing
DADS0281#A	4072	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall be capable of ingesting and storing data to support the instrument science team(s) in: a. Pre-launch checkout of their instruments b. Pre-launch science checkout c. Development of initial calibration information	
DADS0290#A	4074	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall check all metadata and data it receives. For each type of data described by the metadata, the data shall be checked for the presence of required fields, and correctness of the data set granule size.	Full capability A: TRMM only

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DADS0300#A	4076	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall generate status indicating the success or failure of metadata and data consistency checks.	Full capability
DADS0310#A	4088	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall verify that data received came from an approved/authorized source.	
DADS0350#A	4090	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall generate the following metadata items, at a minimum: a. Unique Granule Id for L0 b. Date and time of storage c. Physical location d. Data check status e. Unique format identifiers	A: all
DADS0360#A	4091	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall augment PGS-generated metadata with DADS-generated metadata.	
DADS0370#A	4092	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall provide the IMS with metadata on newly stored data granules.	A: Release A Metadata described in the Data Type Matrix
DADS0425#A	4093	mission essential	SDPS	functional	test	un-verified	test <u>analysis</u>	<u>un-verified</u>	Archive and backup media at each DADS shall have a rated shelf life of at least 10 years as determined by the National Archives and Records Administration (NARA), National Institute for Standards and Technology (NIST), NASA, or a professional or industry organization such as ANSI, the Society of Motion Picture and Television Engineers (SMPTE) or the National Association of Broadcasters (NAB).	A: S-DSS-21655 applies for A/B/C/D for all selected or follow-on form factors.

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DADS0430#A	4094	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall provide its operations personnel the capability to manually alter the routing of data sets to physical storage locations.	A: Can monitor the allocation of storage devices and alter the allocation of storage devices at a Data Server Level. <u>A: Shall provide capability to manually allocate data types to storage devices.</u>
DADS0435#A	4095	mission essential	SDPS	functional	test	un-verified	test <u>demo</u>	<u>un-verified</u>	At each DADS operations personnel shall be able to add new physical volumes and eject physical volumes from the archive for off-line or off-site permanent storage.	A: Full capability to add and eject media
DADS0440#A	4096	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall provide storage, at a minimum, for the following EOS data: a. Standard Products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms h. Format descriptions (e.g., HDF spec.)	A: Release A products for the missions as described in the table in the SOW. <u>A: For CERES on TRMM.</u>
DADS0460#A	4098	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall provide storage at a minimum, for non-EOS data required for Standard Product production by the PGS.	A: Release A products for the missions as described in the table in the SOW. <u>A: For CERES on TRMM</u>

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DADS0465#A	4099	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	The DADS shall provide storage for the following Version 0 data: a. Standard products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms.	A: Release A products for the missions as described in the table in the SOW. <u>A: At GSFC and LaRC for initial migration.</u>
DADS0475#A	6124	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	The DADS shall provide storage for the following TRMM data: a. L1A-L4 equivalent data products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Associated metadata f. Documents g. Algorithms.	
DADS0490#A	4103	mission essential	SDPS	functional	test	un-verified	test	<u>un-verified</u>	Each DADS shall archive Level 1B - Level 4 data products.	A: Release A products for the missions as described in the table in the SOW. <u>A: For V0 migration data @ GSFC and LaRC and TSDIS @ GSFC and CERES @ LaRC.</u>
DADS2315#A	4473	mission critical	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	Each DADS shall be capable of providing access to data to support the instrument science team(s) in: a. Pre-launch checkout of their instruments b. Pre-launch science checkout c. Development of initial calibration information.	A: TRMM - CERES, LIS

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DADS2320#A	4475	mission essential	SDPS	functional	demo	un-verified	demo <u>test</u>	<u>un-verified</u>	Each DADS shall send to the IMS, at a minimum, the following: a. Metadata b. Documentation c. Product status dialog	
DADS2330#A	6408	mission essential	SDPS	functional	demo	un-verified	demo <u>test</u>	un-verified	Each DADS shall send to the PGS, at a minimum, the following: b. L0-L4 d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status k. Special data sets l. Non-EOS science data from ADCs/ODCs	A: sub-item A: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS A: 'Algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server.

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DADS2340#A	4481	mission essential	SDPS	functional	demo	un-verified	demo test	<u>un-verified</u>	Each DADS shall send to remote DAACs, at a minimum, the following: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	A: sub-items a,b,c,d,e,f,g: TRMM - CERES; LIS A: GSFC will forward to LaRC NMC, TOMS, and VIRS data for CERES processing.
DADS2380#A	6410	mission essential	SDPS	functional	demo	un-verified	demo test	un-verified	Each DADS shall send to the SCF, at a minimum, the following: a. L0-L4 b. Expedited data d. Metadata e. Ancillary data f. Calibration data g. Correlative data h. Documents i. Algorithms	1: 'Algorithms' implies science software components. Algorithm and calibration data are accessed by HTML services provided through Data Server.
DADS2450#A	4499	mission essential	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	Each DADS shall distribute data to elements of EOSDIS and approved non-EOSDIS data destinations.	This requirement is supported as follows: Ir1 shall process requests for archived TRMM data for the purpose of testing the TSDIS interface, only. Ir1 provides no capability to retrieve data from an archive.
DADS2490#A	4508	mission essential	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	Each DADS shall distribute data using a variety of approved high density storage media such as : a. 8 mm tape b. 4 mm DAT c. 3480/3490 tape d. CD ROM e. 6250 tape	

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DADS2510#A	4510	mission essential	SDPS	functional	demo	un-verified	demo test	<u>un-verified</u>	Each DADS shall copy data to the class of physical media specified in the product order from the IMS.	
DADS2580#A	4515	mission essential	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	Each DADS shall distribute data electronically using a variety of networks, and methods including FAX.	
DADS2675#A	4518	mission essential	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	Each DADS shall maintain a log of all transmission problems, take internal corrective action, and notify SMC when network performance begins to impact distribution effort adversely.	<u>LSM is notified, not the SMC</u>
DADS2770#A	4517	mission fulfillment	SDPS	performance	demo	un-verified	demo	<u>un-verified</u>	Upon receipt and approval of a request, the designated DADS shall make stored data products available for delivery to the requester within 24 hours for data distributed on physical media.	
DADS2778#A	6436	mission essential	SDPS	performance	demo	un-verified	test	un-verified	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.	<u>A: TRMM rates only. Release A archive throughput is calculated based on the capacity to accommodate the Release A supported missions until the operational turnover of Release B (Through 3 quarter of 98). The archive at GSFC is sized to support the TSDIS data (along with required ancillary) and V0 migration data while LaRC archive is sized to support the CERES (TRMM) data (along with required ancillary) and V0 migration data. Total throughput capacity for 3 days worth of data in 1 day, derived from the August, 1995 Technical Baseline (Release A procurement baseline), in GB/day is 82 @ GSFC and 40 @ LaRC. No Release A archive capacity is provided at EDC.</u>

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DADS2900#A	6437	mission essential	SDPS	performance	demo	un-verified	analysis	un-verified	Each DADS shall provide archival capacity for current volume requirements plus one year. Volume requirements are specified in Appendix C.	<u>A: Release A archives are sized with the capacity to accommodate the Release A supported missions until the operational turnover of Release B (Through 3 quarter of 98). The archive at GSFC is sized to support the TSDIS data (along with required ancillary) and V0 migration data while LaRC archive is sized to support the CERES (TRMM) data (along with required ancillary) and V0 migration data. Total accumulated Release A archive capacity, derived from the August, 1995 Technical Baseline (Release A procurement baseline), in TBytes is 13.3 @ GSFC and 5.6 @ LaRC. No Release A archive capacity is provided at EDC.</u>
DADS2910#A	4522	mission essential	SDPS	performance	demo	un-verified	demo	<u>un-verified</u>	Archival storage at each DADS shall be field-expandable.	
DADS2950#A	4523	mission critical	SDPS	performance	demo	un-verified	demo	<u>un-verified</u>	In case of failure of the automated system, archive media must be capable of being manually mounted at each DADS.	
DADS3000#A	4524	mission essential	SDPS	performance	demo	un-verified	demo	<u>un-verified</u>	To support archival data integrity, the bit error rate after correction shall be less than 1 in 10 to the 12th.	
DADS3010#A	4526	mission essential	SDPS	performance	inspection	un-verified	inspection	<u>un-verified</u>	Archival and backup media at each DADS shall have a manufacture-rated shelf life of at least 10 years when stored in a controlled environment.	
DADS3040#A	6438	mission essential	SDPS	performance	inspection	un-verified	<u>test demo</u>	un-verified	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).	

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DADS3090#A	4530	mission fulfillment	SDPS	performance	analysis	un-verified	analysis	<u>un-verified</u>	Each DADS shall be capable of 200% expansion in throughput and archive capacity without architecture or design change. This expansion capacity shall apply to the total of the at-launch requirement plus the yearly growth requirement specified in Appendix C.	
DADS3100#A	4531	mission essential	SDPS	performance	test	un-verified	test	<u>un-verified</u>	Each DADS shall be capable of transmitting data over communications network in support of data production requests at the data rate specified in Appendix C and in support of data distribution requests at a rate equivalent to daily product volume (L1-L4).	A: TRMM-only <u>Release A Data Server supports the data production flows at LaRC for CERES and the following network distribution flows, as derived from the L1-L4 volume in the August, 1995 Technical Baseline (Release A procurement baseline): @ LaRC 13.4 GB/day to users and @ GSFC 27.3 GB/day to user and 5.4 GB/day to TSDIS for reprocessing.</u>
DADS3135#A	6494	mission essential	SDPS	performance	demo	un-verified	test	un-verified	The DADS shall have the capability to support the transaction rate as specified in Table 7-4.	
DADS3140#A	4543	mission essential	SDPS	functional	demo	un-verified	demo <u>inspection</u>	<u>un-verified</u>	The DADS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of DAAC-unique data ingest services operated independently of the delivered ECS DADS services.	

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Table 2 - RbR Deletion Table: This table identifies deletions of existing requirements in the RbR class as identified in the 7/31 baseline version of the RTM Database.

DADS0175#A	-4059	mission essential	SDPS	functional	test	un-verified	test	un-verified	The GSFC DADS shall receive from FDF, at a minimum: a. Orbit data b. Attitude data c. Metadata	A: receive only. Early interface testing for AM
DADS0320#A	-4089	mission essential	SDPS	functional	test	un-verified	test		Each DADS shall verify compliance of scientist-provided data with EOSDIS defined standards for metadata and file content (not scientific content).	A: in support of ingest interface testing
DADS0450#A	-4097	mission essential	SDPS	functional	test	un-verified	test		Each DADS shall provide storage, at a minimum, for the following scientist provided data: a. Special data products b. Associated correlative data sets c. Associated ancillary data sets d. Associated calibration data sets e. Research results (articles, algorithms, data sets, software) f. Instrument characterization data sets g. Associated Metadata	This capability is provided to scientists in Release B/C/D.
DADS2345#A	-4483	mission essential	SDPS	functional	demo	un-verified	demo		Each DADS shall send to ADCs, at a minimum, the following: a. L0-L4 b. Metadata c. Ancillary data d. Calibration data e. Correlative data f. Documents g. Algorithms	A: NOAA only
DADS2780#A	-4520	mission essential	SDPS	performance	demo	un-verified	demo	un-verified	Each DADS shall be capable of ingesting data at the maximum output bandwidth of the EOS.	A: Interface testing only